THIS OPINION WAS NOT WRITTEN FOR PUBLICATION

The opinion in support of the decision being entered today

- (1) was not written for publication in a law journal and
- (2) is not binding precedent of the Board.

Paper No. 20

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte JOEL D. OXMAN and LARRY D. BOARDMAN

Appeal No. 94-4291 Application 07/627,009¹

ON BRIEF

Before JOHN D. SMITH, GARRIS, and WARREN, <u>Administrative</u> <u>Patent Judges</u>.

GARRIS, Administrative Patent Judge.

DECISION ON APPEAL

This is a decision on an appeal which involves claims 1, 2, 7-13, 15-21, 26-32, 34-36, 42, 43 and 45 through 51. The

¹ Application for patent filed December 13, 1990.

only other claims remaining in the application, which are claims 52-55 have been allowed by the examiner.

The subject matter on appeal relates to a hydrosilation process and composition as well as certain products made therefrom. This appealed subject matter is adequately illustrated by independent claim 1, a copy of which taken from the appellants' brief is appended to this decision.

The references relied upon by the examiner as evidence of obviousness are:

Gruber	4,017,652	Apr.	12,	1977
McDowell	4,169,167	Sep.	25,	1979
Drahnak	4,510,094	Apr.	9,	1985
Eckberg	4,587,137	May	6,	1986

In the double patenting rejections before us, the examiner also relies upon the claims of U.S. Patent No. 4,916,169 (Boardman) as well as the claims of co-pending application 07/626,904 ('904 application).²

 $^{^2\,}$ The examiner's provisional double patenting rejection based upon the claims of application 07/626,905 is nullified and thus not before us by virtue of the abandonment of this application.

All of the claims on appeal are rejected as follows:3

- (1) unpatentable under 35 U.S.C. § 103 over Eckberg in view of Drahnak and further in view of Gruber or McDowell;
- (2) unpatentable under the doctrine of obviousnesstype double patenting over the claims of Boardman in view of Eckberg; and
- (3) provisionally unpatentable under the doctrine of obviousness-type double patenting over the claims of the '904 application in view of Drahnak.

We refer to the brief and to the answer for a complete exposition of the opposing viewpoints expressed by the appellants and the examiner concerning the above noted rejections.

OPINION

For the reasons which follow, we will sustain each of these rejections.

The section 103 rejection

As correctly observed by the appellants, Eckberg fails to disclose the specific catalyst defined by the appealed claims.

Nevertheless, Drahnak explicitly teaches effecting hydrosilation reactions of the type under consideration with

The appealed claims will stand or fall together; see page 9 of the brief.

the here claimed catalyst, and we fully agree with the examiner that it would have been obvious for one with ordinary skill in the art to replace the catalyst of Eckberg with the catalyst of Drahnak in order to obtain the advantages associated with this catalyst (e.g., see lines 51 through 62 in column 2 of Drahnak).

On pages 19 and 20 of the brief, the appellants argue that it would have not been obvious to combine Eckberg and Drahnak in the manner opposed above. In this regard, the appellants state that Eckberg's composition is capable of reacting prematurely at room temperature whereas "[t]he catalyst of Drahnak . . ., which is the only precious metal catalyst set forth in the claims of the present application, will not result in premature gelation or curing, for the reason that it will not activate a hydrosilation reaction at temperatures below about 50EC in the absence of actinic radiation", and accordingly "it is clear that the teachings of Eckberg are in conflict with the teachings of Drahnak" (brief, page 20; emphasis in original). It is the appellants' position that, as a result of this "conflict", there would

have been no motivation for one of ordinary skill in the art to combine Eckberg with Drahnak.

We cannot agree. While it is correct that Eckberg teaches his compositions may react prematurely at room temperature and that such premature reaction would not occur in using Drahnak's catalyst, these facts militate for, rather than against as urged by the appellants, replacing Eckberg's catalyst with the catalyst of Drahnak. This is because the proposed catalyst replacement would eliminate the undesirable potential for the premature reaction disclosed by Eckberg.

The appellants further argue that "Eckberg also fails to disclose or suggest the specific classes of photoinitiators recited in Claims 1 and 21" (brief, page 21). However, the examiner has relied upon the teachings of Gruber or McDowell to support his conclusion that it would have been obvious to use photoinitiators of the type under consideration in the process and composition of Eckberg. In the last two

⁴ It is appropriate to explicitly emphasize that this argument is not applicable to independent claim 45 since this claim is not limited to such photoinitiators.

⁵ By way of clarification, we point out that the examiner's proposed combination of Eckberg and Gruber or

paragraphs on page 22 of the brief, the appellants clearly indicate that they will present no arguments concerning the examiner's obviousness conclusion vis à vis her proposed combination of Eckberg with Gruber or McDowell. Under these circumstances, the appellants' point that Eckberg contains no disclosure of the specific photoinitiators recited in independent claims 1 and 21 is simply not germane to the obviousness issue advanced by the examiner on this appeal.

Finally, the appellants argue that both Drahnak and Eckberg are silent with respect to curing by visible radiation. This argument is unpersuasive because none of the independent claims on appeal requires curing by visible radiation and because the appealed claims stand or fall together as noted earlier in this decision. In any event, the argument lacks persuasive merit. While Drahnak may prefer use of ultraviolet radiation for curing, he discloses using actinic radiation generally (see line 13 in column 9) and more

McDowell was previously advanced in the rejection of dependent claims 4, 6, 23 and 25 and that these claims were canceled and the subject matter thereof incorporated into independent claims 1 and 21 via amendments filed after the final rejection.

specifically any radiation source emitting radiation below about 4000 Angstroms (see lines 54 and 55 in column 9), thereby suggesting the use of visible light. In this regard, we point out that a wavelength of 3900 Angstrom for example, is applicable to both the longest ultraviolet radiation wavelength and the shortest visible radiation wavelength (e.g., see Hackh's Chemical Dictionary, 3rd edition, page 716, copy attached).

In light of the foregoing, we will sustain the section

103 rejection of the appealed claims as being unpatentable

over Eckberg in view of Drahnak and further in view of Gruber

or McDowell.

The obviousness-type double patenting rejection

In her answer, the examiner has stated that all of the claims on appeal are rejected under the doctrine of obviousness- type double patenting over the claims of Boardman in view of Eckberg. It is appropriate to here clarify that, in her earlier rejections (i.e., paper nos. 7 and 9), the examiner also combined the Gruber or McDowell references with

Eckberg and Drahnak in rejecting dependent claims drawn to the specific photoinitiators now recited in independent claims 1 and 21.6 Quite clearly, the examiner has committed inadvertent error in failing to include the Gruber and McDowell references in the obviousness-type double patenting rejection advanced on this appeal against independent claims 1 and 21. Nevertheless, since the appellants in their brief have presented explicit arguments relative to the obviousness of combining Eckberg with Gruber or McDowell, this inadvertent error on the examiner's part is harmless. Therefore, we shall address below the subject rejection of claims 1 and 21 as though it included the Gruber and McDowell references as well as the appellants' arguments concerning these references.

On page 15 of the brief, the appellants present the following succinct exposition of their nonobviousness position:

Because of the lack of suggestion in the <u>claims</u> of Boardman to use a photoinitiator, because of Eckberg's failure to disclose or suggest the <u>specific</u> photoinitiators recited in the claims of the present application, and because McDowell and

⁶ We again emphasize that independent claim 45 is not limited to such specific photoinitiators.

Gruber have nothing to do with hydrosilation processes catalyzed by a platinum complex, it is submitted that the claims of the present application would not have been obvious to one of ordinary skill in the art from the combination of the <u>claims</u> of Boardman with the disclosures of Eckberg, McDowell, and Gruber. [Emphasis in original].

This argument does not convince us that the subject matter defined by independent claims 1 and 21 would not have been obvious. In our opinion, Eckberg's teaching of effecting his hydrosilation reaction via free radical type photoinitiators generally would have suggested to one with ordinary skill in the art using the specific free radical type photoinitiators of Gruber or McDowell in the hydrosilation process claimed by Boardman motivated by a desire to obtain the advantageous functions performed by these specific photoinitiators and based upon a reasonable expectation, gleaned from Eckberg's aforementioned disclosure, of success in using these specific photoinitiators in Boardman's claimed hydrosilation process. In re O'Farrell, 853 F.2d 894, 904, 7

On this record, we find no reasonably specific argument concerning independent claim 45 which does not recite specific photoinitiators and is therefore rejectable over the claims of Boardman in view of Eckberg alone sans the teachings of Gruber or McDowell.

USPQ2d 1673, 1681 (Fed. Cir. 1988) (for obviousness under section 103, all that is required is a reasonable expectation of success).

For these reasons, we will also sustain the examiner's obviousness-type double patenting rejection of the appealed claims over the claims of Boardman in view of Eckberg considered alone with the respect to independent claim 45 and considered in combination with Gruber or McDowell with respect to independent claims 1 and 21.

As a final point of interest, we observe that the appellants in their brief have stated, "[a]ccording to In re

Braat, 19 U.S.P.Q. 2d 1289 (Fed. Cir. 1991), a "two-way"

determination is necessary in order to sustain a rejection for obviousness-type double patenting" (brief, page 13).

Nevertheless, the brief contains only the previously discussed arguments which relate to a "one-way" determination. As a consequence, even if a "two-way" determination were necessary in the case before us, the examiner's obviousness-type double patenting rejection would still be sustained since the only arguments made thereagainst are limited to a "one-way" determination and are unpersuasive. In any event, it is plain

that a "one-way" analysis is the proper test for the obviousness-type double patenting rejection before us based upon the rationale set forth in the recent case of <u>In re</u>

<u>Emert</u>, 124 F.3d 1458, 44 USPQ2d 1149 (Fed. Cir. 1997).

The provisional obviousness-type double patenting rejection

We fully share the examiner's conclusion that it would have been obvious for one with ordinary skill in the art to substitute Drahnak's catalyst for the catalyst in the claims of the '904 application in order to obtain the advantages disclosed by Drahnak and based upon a reasonable expectation of success. O'Farrell, Id. It is the appellants' basic contention that such a substitution would not have been obvious "because catalytic activity is unknown except by actual test" (brief, page 19). That is, the appellants in essence believe no basis exists for a reasonable expectation that Drahnak's catalyst would be successfully used in the hydrosilation process and composition claimed in the '904 application. However, the requisite

expectation is provided by Drahnak's explicit teaching that his catalyst effects hydrosilation reactions of the type under consideration.

Summary

Each of the rejections before us on this appeal has been sustained, and the decision of the examiner is affirmed.

No time period for taking any subsequent action in connection with this appeal may be extended under $37 \ \text{CFR} \ \S \ 1.136(a)$.

<u>AFFIRMED</u>

	John D. Smith Administrative Patent	Judge))	
PATENT	Bradley R. Garris)	BOARD OF
	Administrative Patent	Judge))	APPEALS AND INTERFERENCES
tdc	Charles F. Warren Administrative Patent	Judge)	

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$$CpPt - R^2 \\ R^3$$

wherein

- cp represents a cyclopentadienyl group that is eta-bonded to the platinum atom, the cyclopentadienyl group being unsubstituted or substituted with one or more groups that do not interfere in a hydrosilation reaction, and
- each of R^1 , R^2 , and R^3 represents an aliphatic grouphaving from one to eighteen carbon atoms, said R^1 , R^2 , and R^3 groups being sigmabonded to the platinum atom and a freeradical photoinitiator that is capable of absorbing actinic radiation such that the hydrosilation reaction is initiated upon exposure to actinic radiation, said freeradical photoinitiator selected from the group consisting of (1) monoketals of α -diketones or α -ketoaldehydes having the general formula:

APPENDIX

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$$\begin{array}{cccc} & & & OR^6 \\ R^4 & & & & \\ -C - & & -C - R^5 \\ & & OR^7 \end{array}$$

wherein R⁴ represents an unsubstituted aryl group or an aryl group substituted with one or more groups that do not interfere with the hydrosilation reaction, R⁵, R⁶, and R⁷ each independently represents a member selected from the group consisting of unsubstituted aryl groups and aryl groups substituted with one or more groups that do not interfere with the hydrosilation reaction, aliphatic groups having one to eighteen carbon atoms, and hydrogen and (2) acyloins or ethers of acyloins having the general formula:

$$\begin{array}{ccc} & & O & OR^{11} \\ R^8 - C - C - R^9 \\ & R^{10} \end{array}$$

wherein R^8 represents an unsubstituted aryl group or an aryl group substituted with one or more groups that do not interfere with the hydrosilation reaction, and R^9 , R^{10} , and R^{11} each independently represents a member selected from the group consisting of unsubstituted aryl groups or an aryl group substituted with one or more groups that do not interfere with the hydrosilation reaction, aliphatic groups having from one to eighteen carbon atoms, and hydrogen.